

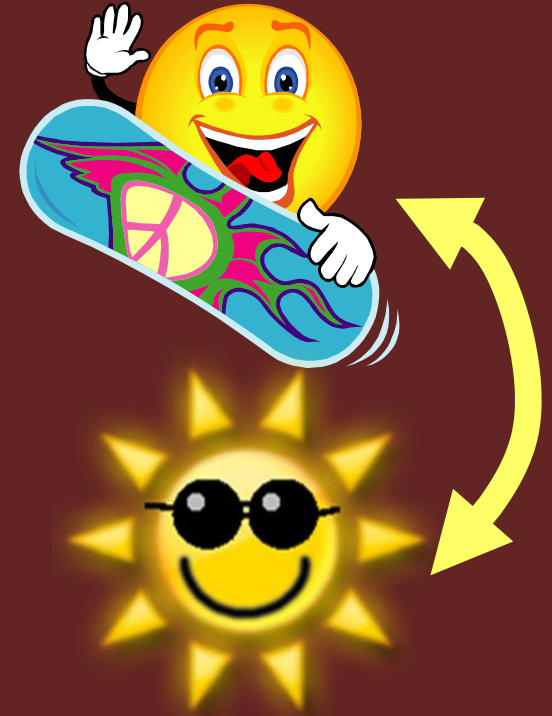
Sun(Light) at the End of the Tunnel? (We Mean it This Time) What's Next for the RGV September 21-23 2013



Helpful Waters Arrive



Saturday, 9/21



Monday, 9/23

Friday, Sept. 20th **5 PM CDT Update**



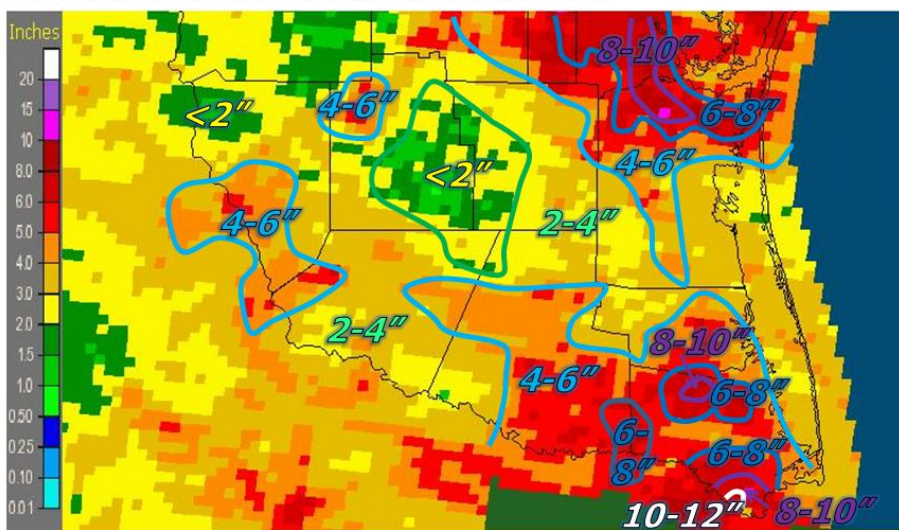
The (Rainy) Story So Far

September 2013 Rainfall

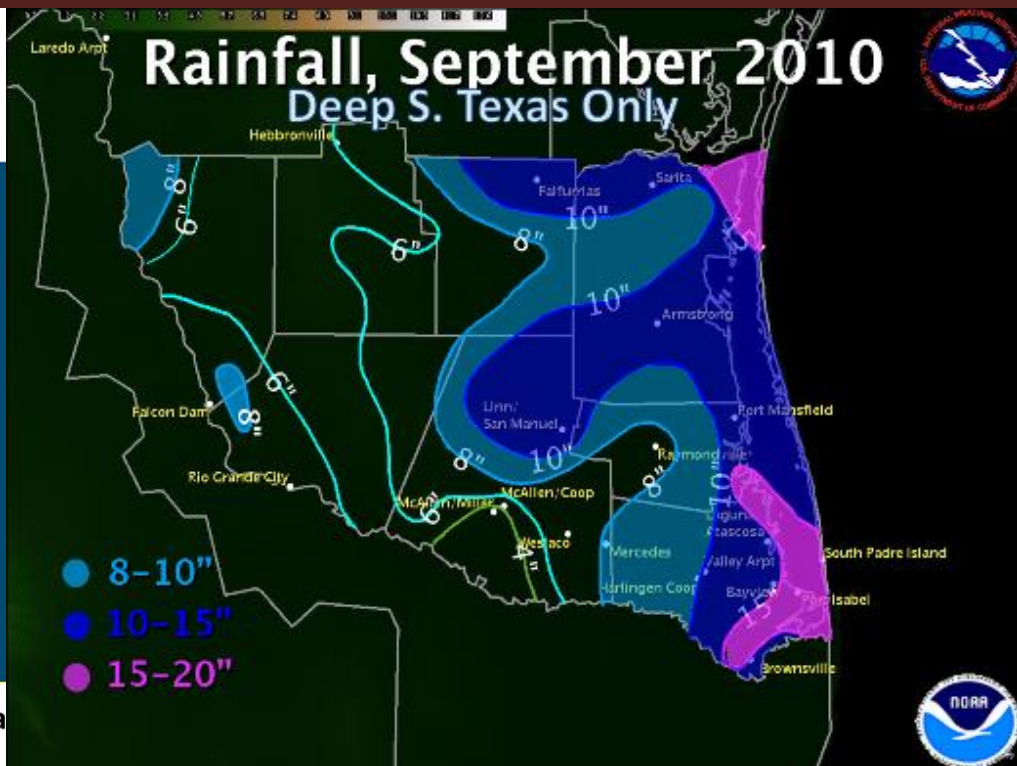
(through 9 AM 9/17)

Brownsville, TX (BR0): Current Month to Date Observed Precipitation

Valid at 9/17/2013 1200 UTC- Created 9/17/13 21:41 UTC



*Based on Observed and Bias-Corrected Radar Estimated Data



It's not been this wet in three years across the RGV Stat Facts:

Notable totals (through 1 PM 9/20):

Brownsville: 11.53 " (1.1" short of 2010)

Harlingen/Valley: 9.08" (**1.91 above 2010**)

McAllen/Miller: 6.19" (**2.56" above 2010**)

Brownsville: 14 Consecutive Days With Rain, Sept. 5-18 (new record; old record 12 in 1891, 1933, 1972)

McAllen: 10 Consecutive Days With Rain, Sept. 9-18 (tied prior record in 1967)

Most areas: **Top 5-7 all time wettest September**



The (Rainy) Story So Far September 2013 (thru 9/20 9 AM)

Cameron County

| | | |
|----------------------------|-------|----|
| Brownsville 1.0 N | 13.41 | 4 |
| Brownsville 2.2 W | 12.95 | 19 |
| Brownsville 4.1 E | 11.37 | 19 |
| Brownsville 0.1 SSE | 11.12 | 19 |
| Brownsville 0.9 SW | 10.41 | 16 |
| Brownsville 1.9 ESE | 9.97 | 11 |
| Los <u>Fresnos</u> 0.8 SSE | 9.42 | 14 |
| Rancho Viejo 0.7 E | 9.28 | 17 |
| Brownsville 4.9 NW | 8.81 | 9 |
| Brownsville 6.4 SE | 8.76 | 19 |
| Brownsville 5.0 NW | 8.35 | 16 |
| Brownsville 2.3 NW | 8.33 | 16 |
| Brownsville 4.2 NE | 8.09 | 14 |
| Brownsville 6.4 WNW | 8.07 | 19 |
| La Feria 1.3 ENE | 8.06 | 10 |
| Harlingen 4.7 WSW | 7.46 | 17 |
| Harlingen 4.3 WSW | 7.37 | 19 |
| Brownsville 3.5 N | 7.27 | 17 |
| Brownsville 4.1 ENE | 7.18 | 14 |
| San Benito 0.6 SSE | 7.11 | 19 |
| Los <u>Fresnos</u> 0.3 NE | 7.08 | 19 |
| Rio Hondo 3.9 ENE | 6.72 | 6 |
| Harlingen 2.6 ESE | 6.39 | 15 |
| Brownsville 2.2 WNW | 6.26 | 10 |
| Laguna Vista 0.3 N | 4.39 | 12 |
| Rio Hondo 9.4 NE | 3.92 | 9 |
| Harlingen 3.1 SSW | 3.54 | 8 |
| South Padre Island 1.1 N | 3.17 | 19 |

Hidalgo County

| | | |
|-----------------------|------|----|
| McAllen 2.4 NE | 7.84 | 19 |
| Mission 1.9 ENE | 5.89 | 15 |
| Alamo 1.5 NNE | 5.83 | 9 |
| <u>La Joya</u> 11.1 N | 5.39 | 19 |
| McAllen 1.7 SSE | 3.83 | 11 |
| Edinburg 1.9 WNW | 2.32 | 1 |
| Mission 4.3 WSW | 2.19 | 10 |

Jim Hogg County

| | | |
|-----------------------|------|----|
| Hebbronville 17.6 WSW | 2.82 | 19 |
|-----------------------|------|----|

Starr County

| | | |
|--------------------------|------|----|
| Rio Grande City 13.8 NNW | 4.78 | 18 |
| Rio Grande City 17.7 NE | 4.44 | 17 |
| Rio Grande City 2.8 W | 1.88 | 8 |

Brooks County

| | | |
|--------------------|------|----|
| Falfurrias 8.9 SSW | 4.18 | 18 |
| Falfurrias 0.5 WNW | 3.25 | 14 |

***Note: Some
Locations with
Less than 10
Reports May
Be Missing
Data**



Pieces of the Puzzle: All Fitting Together!

Sept. 20th @ 2 PM



The Players:

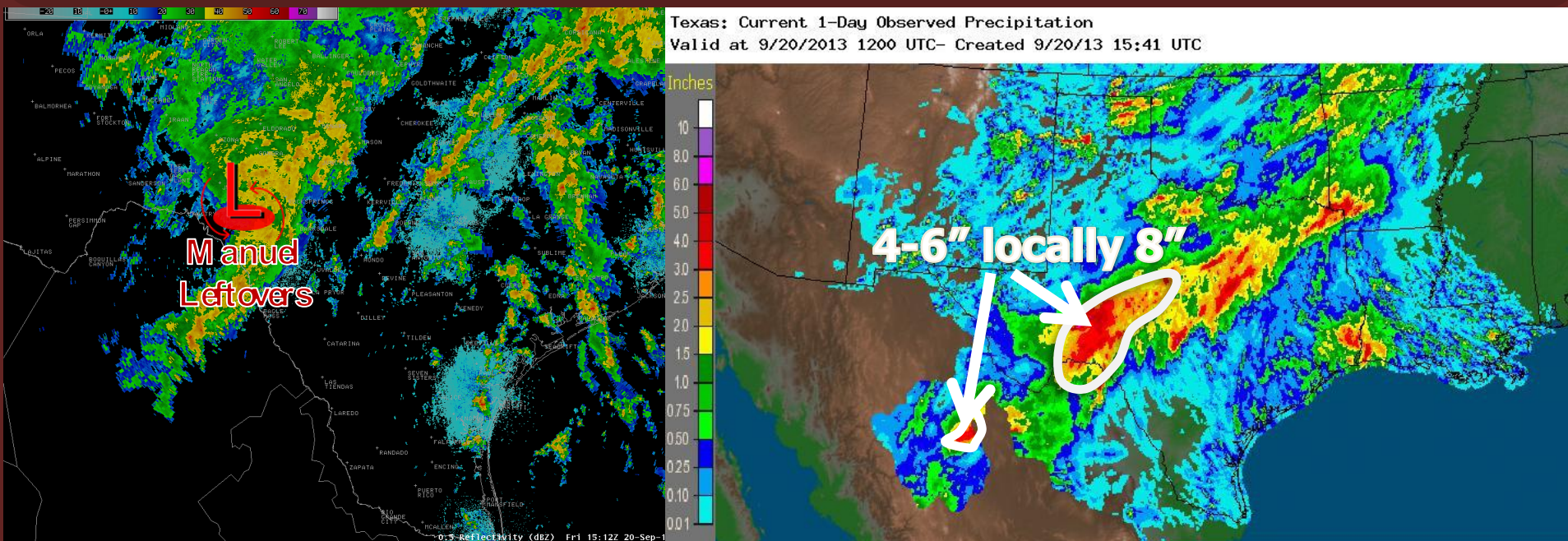
- Remains of Manuel, Moving Northeast, Combined with Upper Level Energy
- Tropical Moisture "Sucked" into System from Southwest Gulf
- Dry Air in Southern Gulf

The Result:

- Torrential Rains Moved from the Rio Conchos across Amistad and Rio Grande Thursday Night and Friday
- Torrential Rains and Flooding Across South Central Texas Friday
- Lesser Rains Expected Along the Southern Edge of "Front" for the RGV on Saturday



Story So Far (Through Friday 9/20)



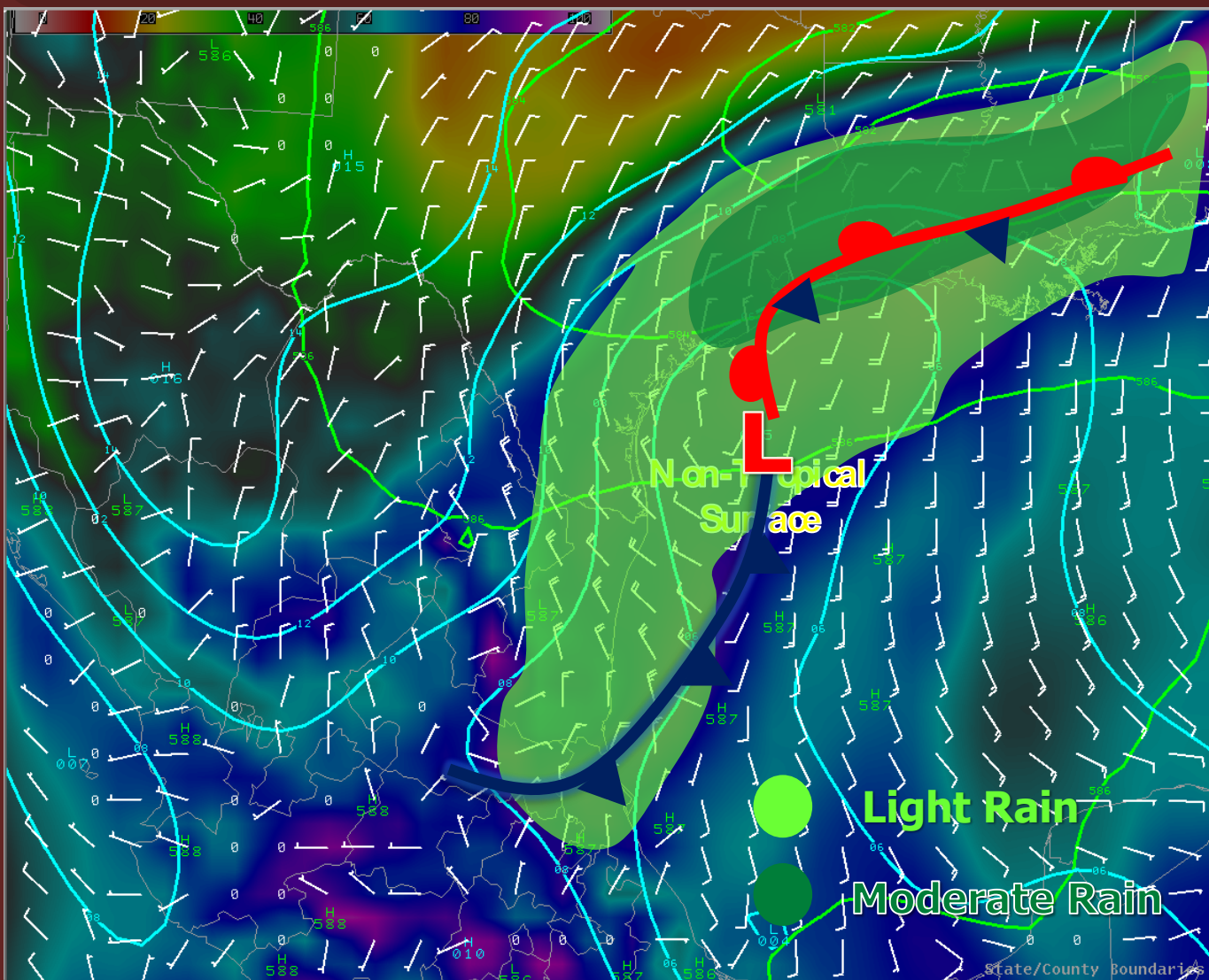
Radar image at 1010 AM Sep. 20

Bias-Corrected Rainfall, 7 AM to 7 AM Sep. 19-20

- Helpful Rains likely to **exceed 10 inches** in a few pockets along the Rio Grande near Amistad
- **Agricultural Flooding** Reported Along Rio Grande west of Amistad
- Flow from Rio Conchos (bottom circled area) and west of Amistad **will increase water levels in Amistad Dam**
- **Some increases for Falcon** due to estimated event rainfall of 3 to 7 inches just south/southwest of Amistad along the River



What's Next: Saturday, Sept. 21



Indoor Day?

- Stiff North-Northeast Wind
- **Nuisance Gusty Showers**
- Possible minor flooding early Cameron/Willacy

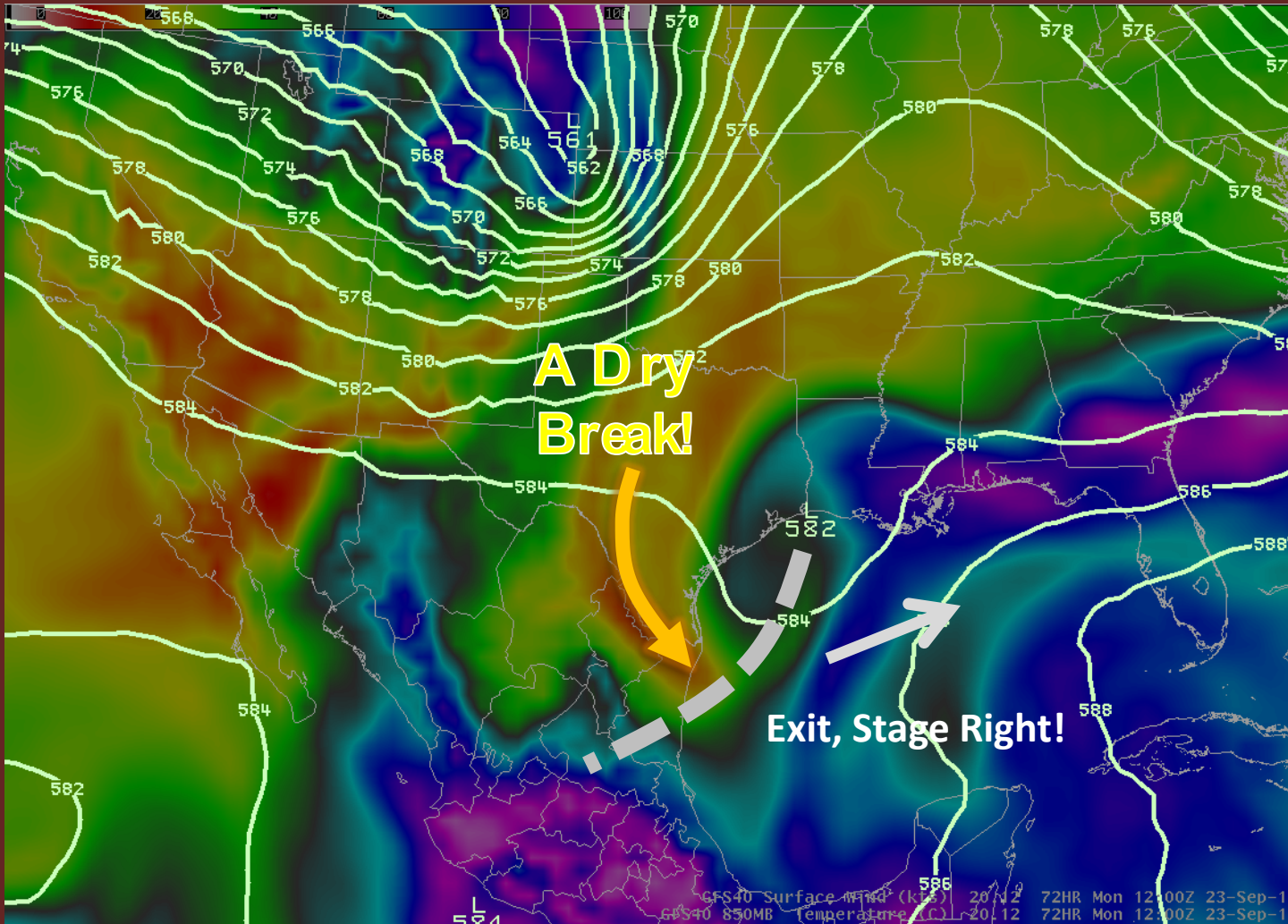
Yucky Beach

- Rough and High Surf
- Tides Close to Dunes at High Tide (~630 PM)
- Nuisance Gusty showers (20 to 25 mph gusts)

“Cold” Front in Name Only ☺



Worth the Wait: Monday Sept. 23

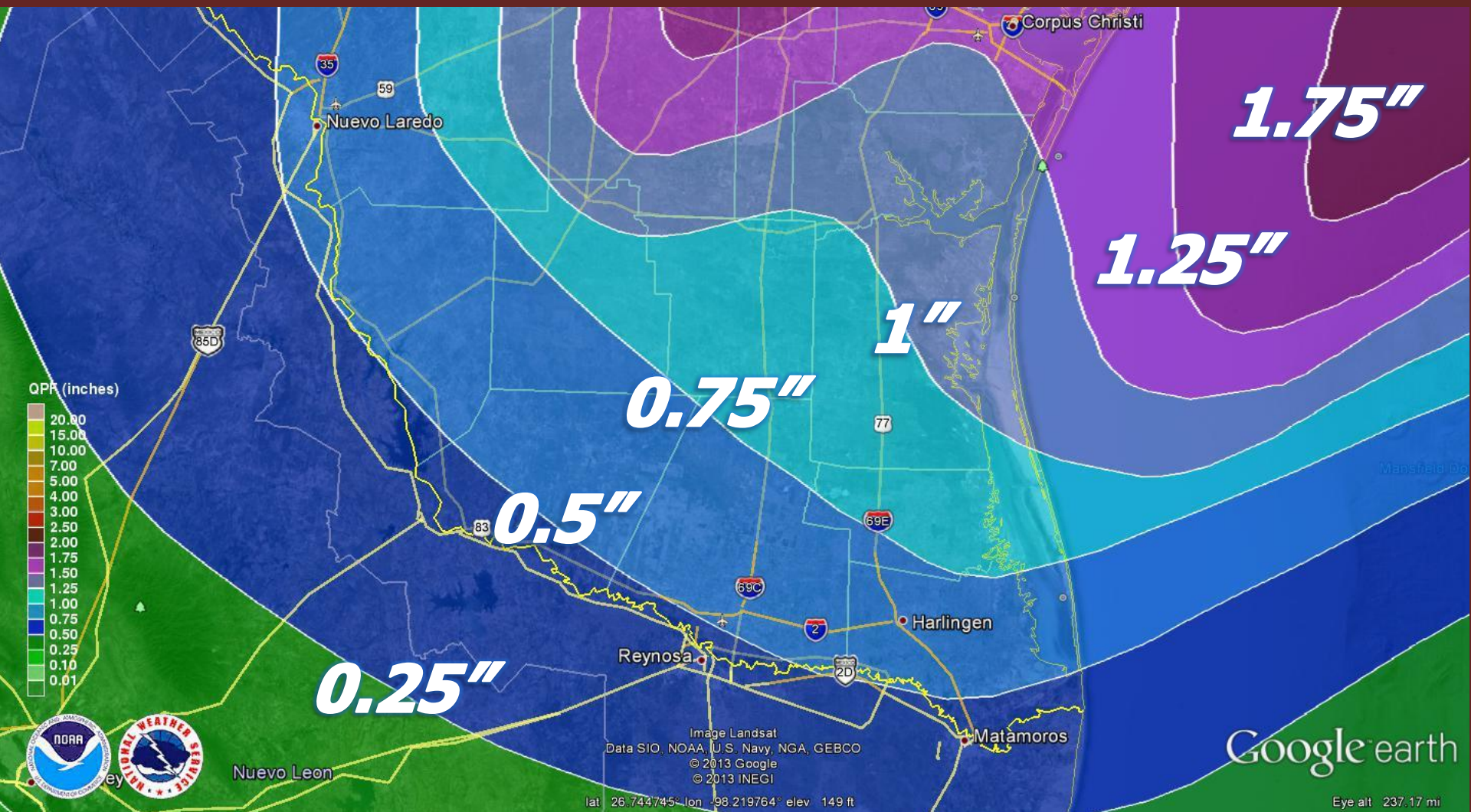


OUTDOOR Day!

- Light Winds
- Sunshine, Pleasant Start to School/Workday
- Reach the Beach...
- ...but Stay Alert to Leftover Rip Currents

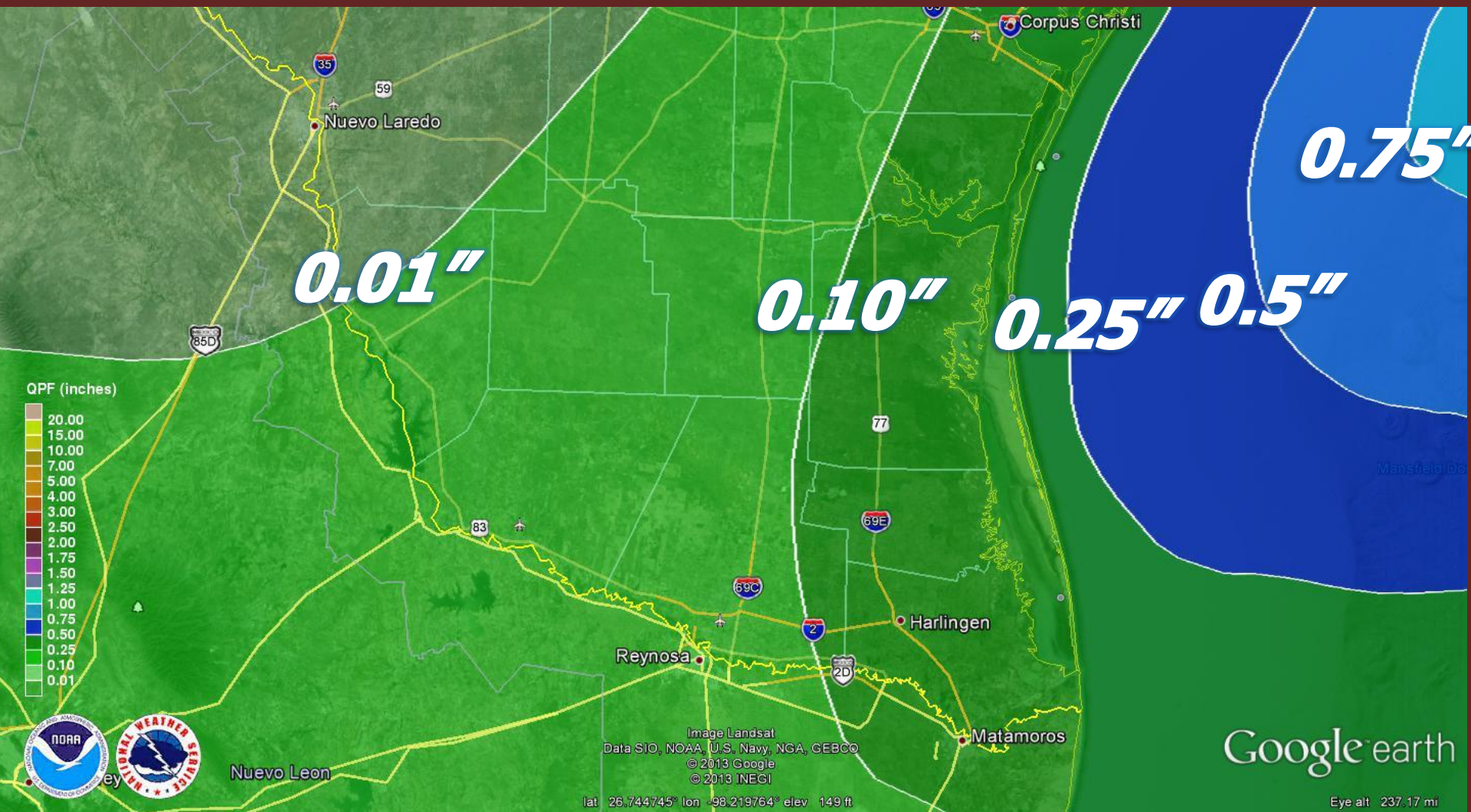


Rainfall Forecast (Through Sat Eve 9/21)





Rainfall Forecast (Sat Eve 9/21-Sun Eve 9/22)





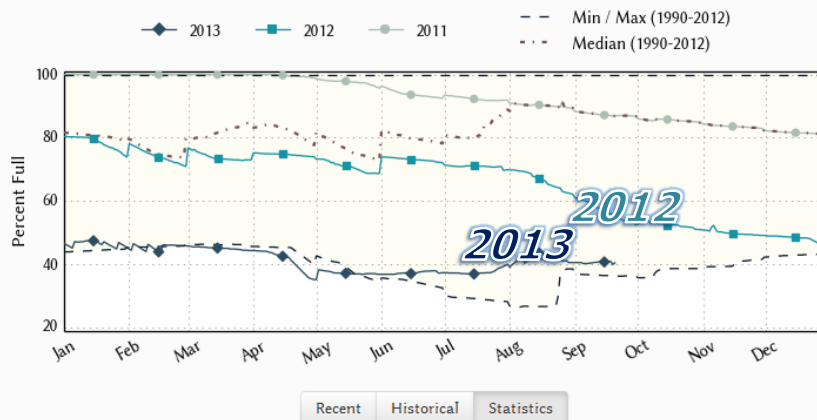
Reservoir Source Map





Reservoir Relief: Friday 9/20

Amistad Reservoir is 40.4% full as of 2013-09-20



note:

Lake Amistad straddles the border of Texas and Mexico. By treaty, Texas has rights 56.2% of the total conservation capacity. The fraction of the actual storage that belongs to Texas is formally determined biweekly by the [International Boundary Water Commission \(IBWC\)](#). The IBWC is the legal repository of data related to this lake for treaty purposes and official versions of the datasets should be obtained directly from them. Conservation capacity is based on 56.2% of total conservation capacity. Conservation storage is based on the bi-weekly changing Texas fraction.

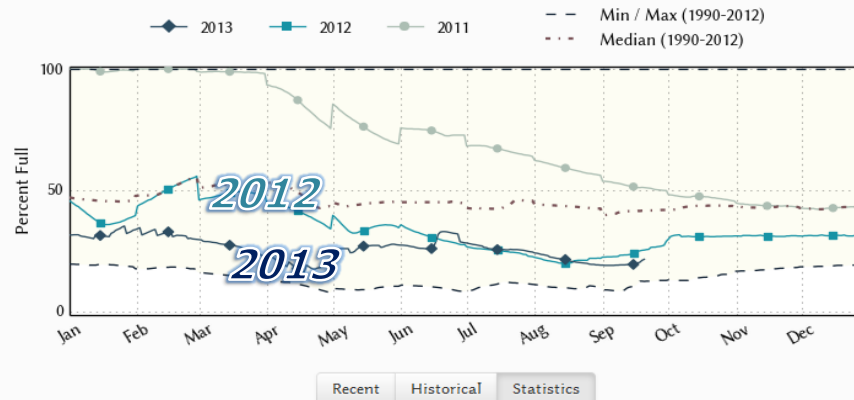
| | Date | Percent Full | Water Level (ft) | Height Above Conservation Pool (ft) | Reservoir Storage (acre-ft) | Conservation Storage (acre-ft) | Conservation Capacity (acre-ft) | Surface Area (acres) |
|-----------|------------|--------------|------------------|-------------------------------------|-----------------------------|--------------------------------|---------------------------------|----------------------|
| Today | 2013-09-20 | 40.4 | 1071.00 | -46.00 | 1160751 | 743542 | 1840849 | 29566 |
| Yesterday | 2013-09-19 | 39.9 | 1070.47 | -46.53 | 1145440 | 733734 | 1840849 | 29217 |

- Helpful Benefits Arriving at **Amistad...**
- Levels Need to Rise 500,000 Acre Feet to Match 2012 Levels
- **Highly Unlikely, but 100-250K Acre Feet? We'll know soon.**
- ****Levels Rose 15,000 Acre Feet Overnight 9/19 to 9/20!**



Reservoir Relief: On to Falcon?

Falcon Reservoir is 21.7% full as of 2013-09-20



note:

Lake Falcon straddles the border of Texas and Mexico. By treaty, Texas has rights 58.6% of the total conservation capacity. The fraction of the actual storage that belongs to Texas is formally determined biweekly by the [International Boundary Water Commission \(IBWC\)](#). The IBWC is the legal repository of data related to this lake for treaty purposes and official versions of the datasets should be obtained directly from them. Conservation capacity is based on 58.6% of total conservation capacity. Conservation storage is based on the bi-weekly changing Texas share.

| | Date | Percent Full | Water Level (ft) | Height Above Conservation Pool (ft) | Reservoir Storage (acre-ft) | Conservation Storage (acre-ft) | Conservation Capacity (acre-ft) | Surface Area (acres) |
|-----------|------------|--------------|------------------|-------------------------------------|-----------------------------|--------------------------------|---------------------------------|----------------------|
| Today | 2013-09-20 | 21.7 | 262.45 | -38.65 | 520301 | 336272 | 1551007 | 30205 |
| Yesterday | 2013-09-19 | 21.3 | 262.17 | -38.93 | 512201 | 331037 | 1551007 | 29900 |

- Some Benefits Coming to **Falcon...**
- Levels Need to Rise ~30,000 Acre Feet to Match 2012 Levels
- **Now looks *likely* by next week...but will the rise match levels of October 2012, when upstream water arrived?**
- ****Overnight (9/19-9/20) Rise of 8,000 Acre Feet**



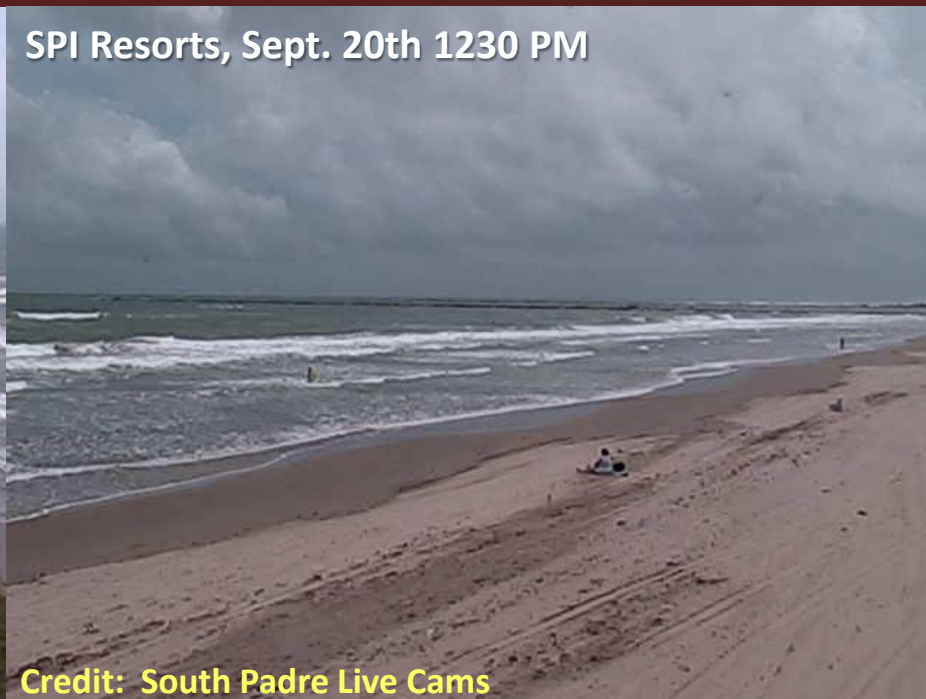
On the Beach...

SPI Resorts, Sept. 16th Aftn.



Credit: South Padre Live Cams

SPI Resorts, Sept. 20th 1230 PM



Credit: South Padre Live Cams

Weekend Forecast Sept. 21-22:

- Tides just below the dunes at high tide Saturday (may look like photo at left)
- Surf should reach 6 foot breakers Saturday and Sunday
- **Dangerous rip currents both days**
- **Beaches may need to be temporarily closed if tides rise high enough Saturday, but alongshore/offshore flow Sunday should pull tides away, like photo at right**



On the Beach...and the Bay

SOUTH PADRE ISLAND COAST GUARD STATION, TX StationId: 8779748

Weekly Tide Prediction in Feet

Time Zone: LST/LDT

Datum: MLLW

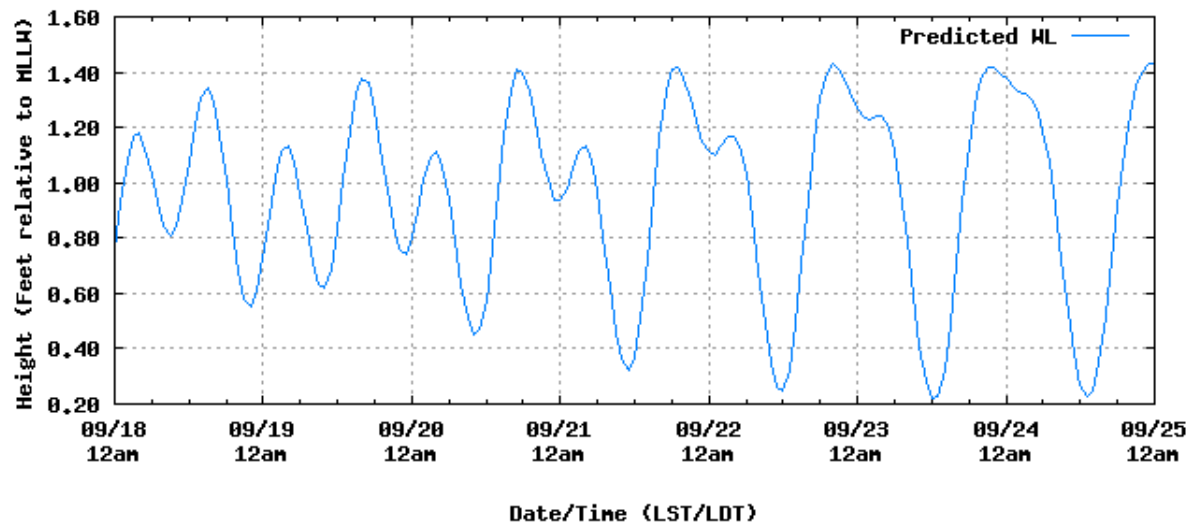
2013/09/18 - 2013/09/24

[Back to Station](#)

[Listing](#)

[Bookmark](#)

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| Date | Day | Time | Hgt |
|-------|-----|----------|--------|
| 09/18 | Wed | 03:35 AM | 1.18 H |
| 09/18 | Wed | 09:06 AM | 0.81 L |
| 09/18 | Wed | 02:55 PM | 1.34 H |
| 09/18 | Wed | 09:50 PM | 0.55 L |
| 09/19 | Thu | 03:42 AM | 1.13 H |
| 09/19 | Thu | 09:41 AM | 0.61 L |
| 09/19 | Thu | 04:12 PM | 1.39 H |
| 09/19 | Thu | 10:44 PM | 0.74 L |
| 09/20 | Fri | 03:48 AM | 1.11 H |
| 09/20 | Fri | 10:19 AM | 0.44 L |
| 09/20 | Fri | 05:25 PM | 1.42 H |
| 09/20 | Fri | 11:38 PM | 0.93 L |
| 09/21 | Sat | 03:50 AM | 1.13 H |
| 09/21 | Sat | 10:58 AM | 0.32 L |
| 09/21 | Sat | 06:38 PM | 1.43 H |
| 09/22 | Sun | 12:35 AM | 1.1 L |
| 09/22 | Sun | 03:41 AM | 1.18 H |
| 09/22 | Sun | 11:38 AM | 0.24 L |
| 09/22 | Sun | 07:58 PM | 1.43 H |
| 09/23 | Mon | 12:21 PM | 0.22 L |
| 09/23 | Mon | 09:36 PM | 1.42 H |
| 09/24 | Tue | 01:09 PM | 0.23 L |

- Predicted Tides Peaking into week of 9/22
- Continue to run 1+ feet above predicted bay side and 2 feet above predicted beachside through early Monday but subside thereafter
- **Primary High Tide in Late Afternoon/Early Evening all Weekend and in evening week of 9/22**



Boating and Fishing

- Seas 7 feet or higher over the weekend
- Winds: 20 knots and gusty Gulf, 15-20 knots and gusty Bay
- Offshore Trips Will Be Difficult due to rain, wind, seas
- Rapidly Improving Conditions Monday-Tuesday Sep. 23/24.



Potential Impact/Action

- **Flooding Impact**
 - **Friday Night Football:** Local brief downpours could make tough sledding. Travelers should be alert to low visibility/ponding of water traveling to and from games
 - **Infrequent Nuisance flooding of poor drainage locations possible through Saturday. Cameron County has best opportunity**
 - **Keep Canals, Ditches, Streets of Debris. Ensure Sewer Access.**
- **Beach Actions**
 - **Poor/Average swimmers out of water through weekend.**
 - **Seasoned Surfers Be Vigilant to Rips**
 - **Be Ready to Move Beach Chairs/Umbrellas Saturday, Just in Case (Few People Expected)**
 - **Rapid Improvement Monday-Wednesday.**



Summary

- **Through Saturday: Less rain intensity, especially Saturday, but still threat for isolated nuisance flooding in poor drainage areas. Favoring Cameron County Saturday.**
- **Sunday: Breezy with clearing west, but rather cloudy close to coast with a few gusty showers on the beach, especially in morning.**
- **Dangerous surf and Rip Currents through Sunday; some tidal run-up Saturday evening.**
- **Monday-Wednesday: Back to the Sunshine? Looks like it. Chamber of Commerce Weather and chance to really “dry out” with lower humidity, comfortable nights.**



Thank
You!

